What is claimed is:

1. An isolated nucleic acid molecule encoding an NMT polypeptide comprising the amino acid sequence of SEQ ID NO:2, as depicted in Fig. 1.

2. An isolated nucleic acid molecule comprising a nucleic acid sequence selected from the group consisting of:

(1) the sequence of SEQ ID NO:1, as depicted in Fig. 1, or degenerate variants thereof;

(2) the sequence of SEQ ID NO:1, or degenerate variants thereof, wherein T is replaced by U;

(3) nucleic acid sequences complementary to sequences of (1) and (2);

(4) nucleic acid fragments of sequences of (1), (2), and (3) that are at least 15 base pairs in length and which hybridize under stringent conditions to genomic DNA encoding the polypeptide of SEQ ID NO:2;

(5) the sequence of SEQ ID NO:3, as depicted in Fig. 2, or degenerate variants thereof;

(6) the sequence of SEQ ID NO:3, or degenerate variants thereof, wherein T is replaced by U;

(7) nucleic acid sequences complementary to sequences of (5) and (6); and

(8) nucleic acid fragments of sequences of (5), (6), and (7) that are at least 15 base pairs in length and that hybridize under stringent conditions to genomic DNA encoding the polypeptide of SEQ ID NO:2.

3. An isolated nucleic acid molecule from *Aspergillus* that is at least 85% identical to SEQ ID NO:1 or SEQ ID NO:3.

4. An isolated nucleic acid molecule that is at least 15 base pairs in length and hybridizes under stringent conditions to SEQ ID NO:1 or SEQ ID NO:3.

5. A vector comprising a nucleic acid molecule of claim 1.

6. A vector comprising a nucleic acid molecule of claim 2.

7. An expression vector comprising a nucleic acid molecule of claim 1 operably linked to a nucleotide sequence regulatory element that controls expression of said nucleic acid molecule.

8. An expression vector comprising a nucleic acid molecule of claim 2, wherein said nucleic acid molecule is operably linked to a nucleotide sequence regulatory element that controls expression of said nucleic acid molecule.

9. A host cell comprising an exogenously introduced nucleic acid molecule of claim 1.

10. A host cell comprising an exogenously introduced nucleic acid molecule of claim 2.

11. A host cell of claim 9, wherein the cell is a fungus, yeast, or bacterium.

12. A host cell of claim 10, wherein the cell is a fungus, yeast, or bacterium.

13. A genetically engineered host cell comprising a nucleic acid molecule of claim 1 operably linked to a heterologous nucleotide sequence regulatory element that controls expression of the nucleic acid molecule in the host cell.

14. A host cell of claim 13, wherein the cell is a fungus, yeast or bacterium.

15. A genetically engineered host cell comprising a nucleic acid molecule of claim 2 operably linked to a nucleotide sequence regulatory element that controls expression of the nucleic acid in the host cell.

16. A host cell of claim 15, wherein the cell is a fungus, yeast or bacterium.

17. An isolated polypeptide encoded by a nucleic acid having the sequence of SEQ ID NO:1 or SEQ ID NO:3.

18. An isolated polypeptide encoded by a nucleic acid molecule of claim 1.

19. An isolated polypeptide encoded by a nucleic acid molecule of claim 2.

20. An isolated polypeptide encoded by a nucleic acid molecule of claim 3.

21. A method for identifying an antifungal agent, the method comprising:

(a) contacting an NMT polypeptide with a test compound; and

(b) detecting binding of the test compound to the NMT polypeptide, wherein binding indicates that the test compound is an antifungal agent.

22. A method of claim 21, further comprising:

(c) determining whether a test compound that binds to the polypeptide inhibits growth of fungi, relative to growth of fungi cultured in the absence of a test compound that binds to the polypeptide, wherein inhibition of growth indicates that the test compound is an antifungal agent.

23. A method of claim 21, wherein the polypeptide is derived from a non-pathogenic *Aspergillus* strain.

24. A method of claim 21, wherein the polypeptide is derived from a pathogenic *Aspergillus* strain.

25. A method of claim 21, wherein the test compound is immobilized on a substrate, and binding of the test compound to the polypeptide is detected as immobilization of the polypeptide on the immobilized test compound.

26. A method of claim 21, wherein the test compound is selected from the group consisting of polypeptides, ribonucleic acids, small molecules, and deoxyribonucleic acids.

27. A pharmaceutical formulation comprising an antifungal agent identified by the method of claim 21, and a pharmaceutically acceptable excipient.

28. A method for treating a fungal infection in an organism, the method comprising administering to the

organism a therapeutically effective amount of the pharmaceutical formulation of claim 27.

29. A pharmaceutical formulation comprising an antifungal agent identified by the method of claim 24, and a pharmaceutically acceptable excipient.

30. A method for treating an *Aspergillus* infection in an organism, the method comprising administering to the organism a therapeutically effective amount of the pharmaceutical formulation of claim 27.

31. The method of claim 30, wherein the organism is a human or rodent.

32. An antibody that specifically binds to a polypeptide of claim 18.

33. An antibody of claim 32, wherein the antibody is a monoclonal antibody.

34. A method for identifying an antifungal agent, the method comprising:

(a) contacting an NMT polypeptide with a test compound;

(b) detecting a decrease in function of the polypeptide contacted with the test compound; and

(c) determining whether a test compound that decreases function of a contacted polypeptide inhibits growth of fungi, relative to growth of fungi cultured in the absence of a test compound that decreases function of a contacted polypeptide, wherein inhibition of growth indicates that the test compound is an antifungal agent.

35. A method of claim 34, wherein the test compound is selected from the group consisting of polypeptides, ribonucleic acids, small molecules, and deoxyribonucleic acids.

36. The method of claim 34, wherein the function is attachment of myristate to an amino-terminal glycine of a polypeptide.

37. A method for identifying an antifungal agent, the method comprising:

(a) contacting a nucleic acid encoding *Aspergillus* NMT with a test compound; and

(b) detecting binding of the test compound to the nucleic acid, wherein binding indicates that the test compound is an antifungal agent.

38. A method of claim 37, further comprising:

(c) determining whether a test compound that binds to the nucleic acid inhibits growth of fungi, relative to growth of fungi cultured in the absence of the test compound that binds the nucleic acid, wherein inhibition of growth indicates that the test compound is an antifungal agent.

39. A method of claim 37, wherein the test compound is selected from the group consisting of polypeptides, small molecules, ribonucleic acids, and deoxyribonucleic acids.

40. An isolated nucleic acid molecule, said molecule comprising the cDNA sequence contained within an American Type Culture Collection (ATCC) accession number _____.

41. A polypeptide encoded by the cDNA sequence of the isolated nucleic acid molecule of claim 40.

42. An isolated polypeptide comprising the sequence of SEQ ID NO:2, as depicted in Fig. 1.

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